

Arizona Dept. of Health; Walkable Community Workshop

-

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Arizona's Future:



**Which
will it be?**

Kindergarten

Talk

Listen

Play

(Snack)*

Draw

Share

Plan

***My daughter's
favorite.**

Walkable Community Workshop

Agenda

- Introductions.
- Presentation: Learn the tools and language.
- Walk audit: See real issues.
- Group problem solving; exploring the 3 P's.
- Discussion & next steps.



Walkable Community Workshop Invitation List

- **Concerned citizens, parents, children.**
- **Professionals: public works, police, fire, health, planners, engineers, school faculty, administration, and staff.**
- **Elected officials and staff.**
- **Businesses, chamber of commerce.**
- **Developers, builders, land owners.**

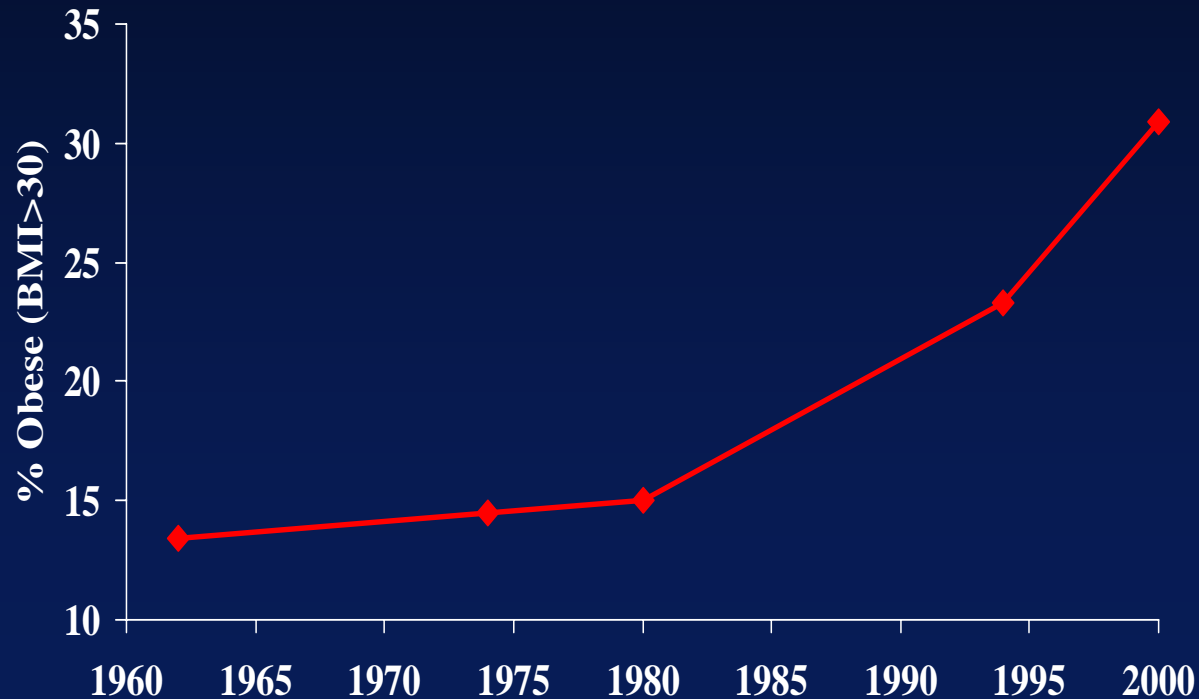
Surgeon General's 1996 Activity Recommendation



- 30 minutes of activity
- Most days of the week.
- Can be broken up.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, clinical depression, some forms of cancer.

Evidence of an Epidemic of Inactivity and Poor Nutrition in the US

Legal et. al. (JAMA 288, 14; Oct. 2002)





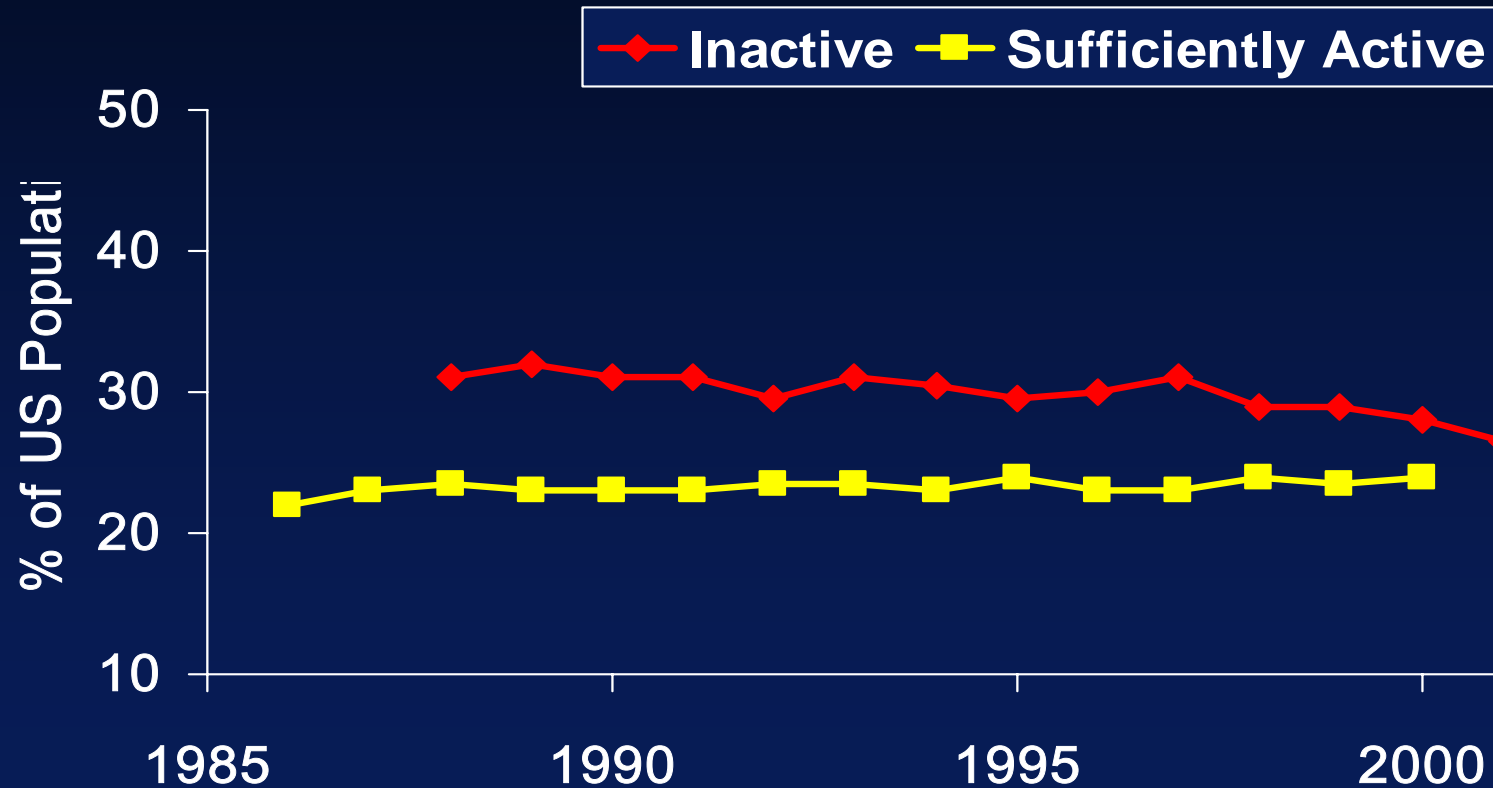
**My rant (and
recommendation):**

**Change the conversation. It's
not just an obesity epidemic.**

**It's an epidemic of physical
inactivity and poor nutrition.**

Physical Activity in the US

(MMWR 50 (09); 166-9; Mar. 9, 2001)



How fast do cars go here?



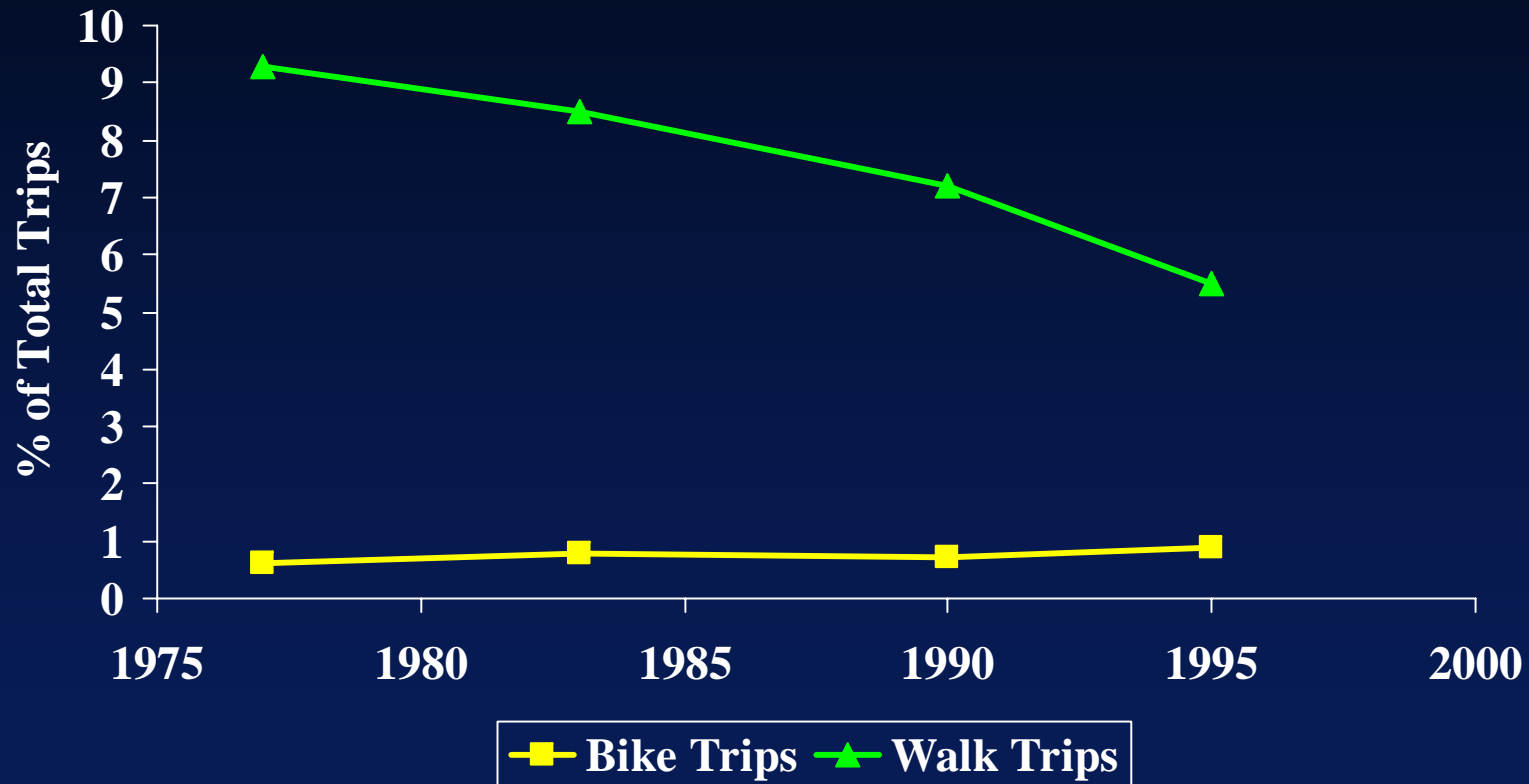
25 mph?

45 mph!



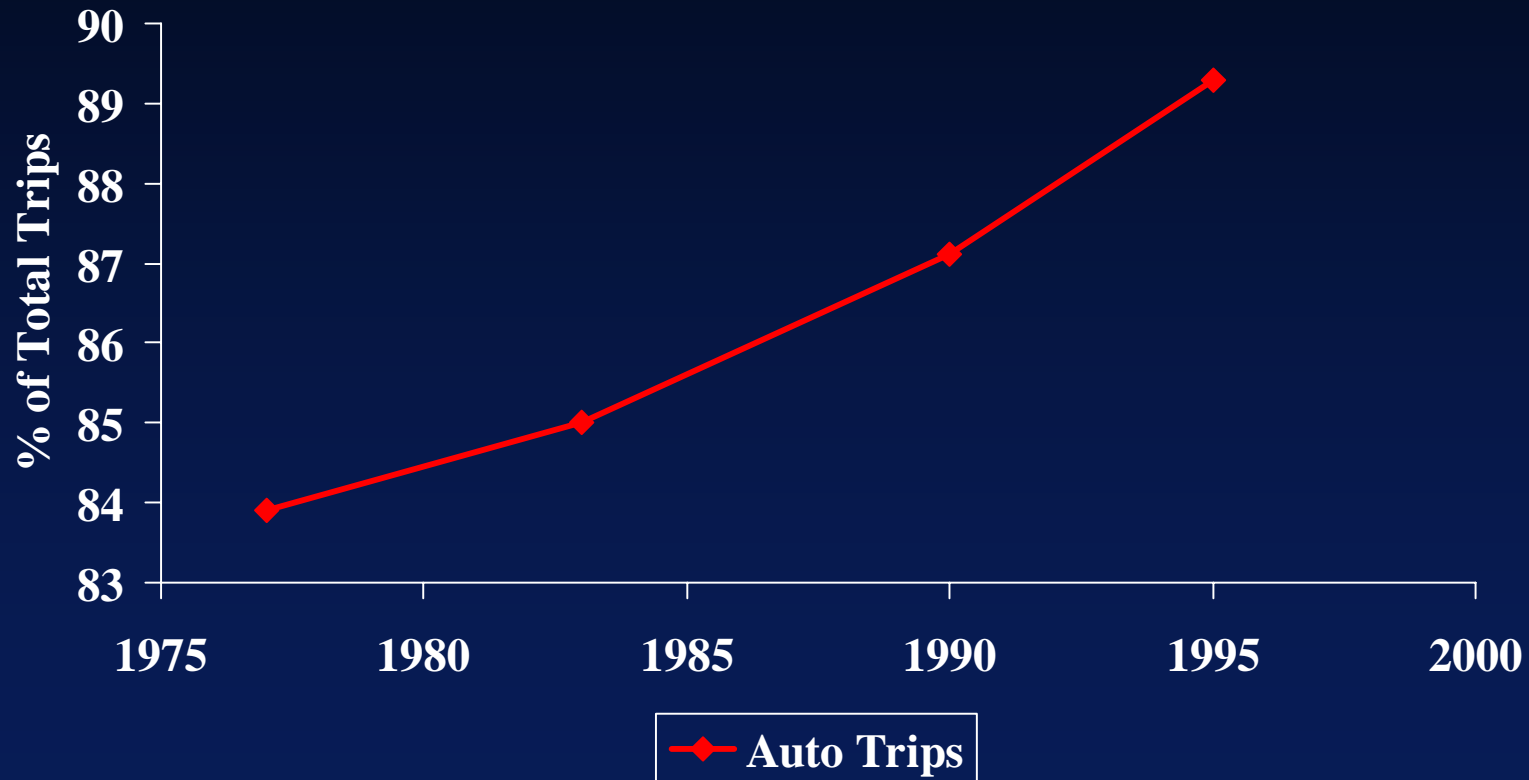
US Walking Trips 1977-1995

National Personal Transportation Survey, USDOT

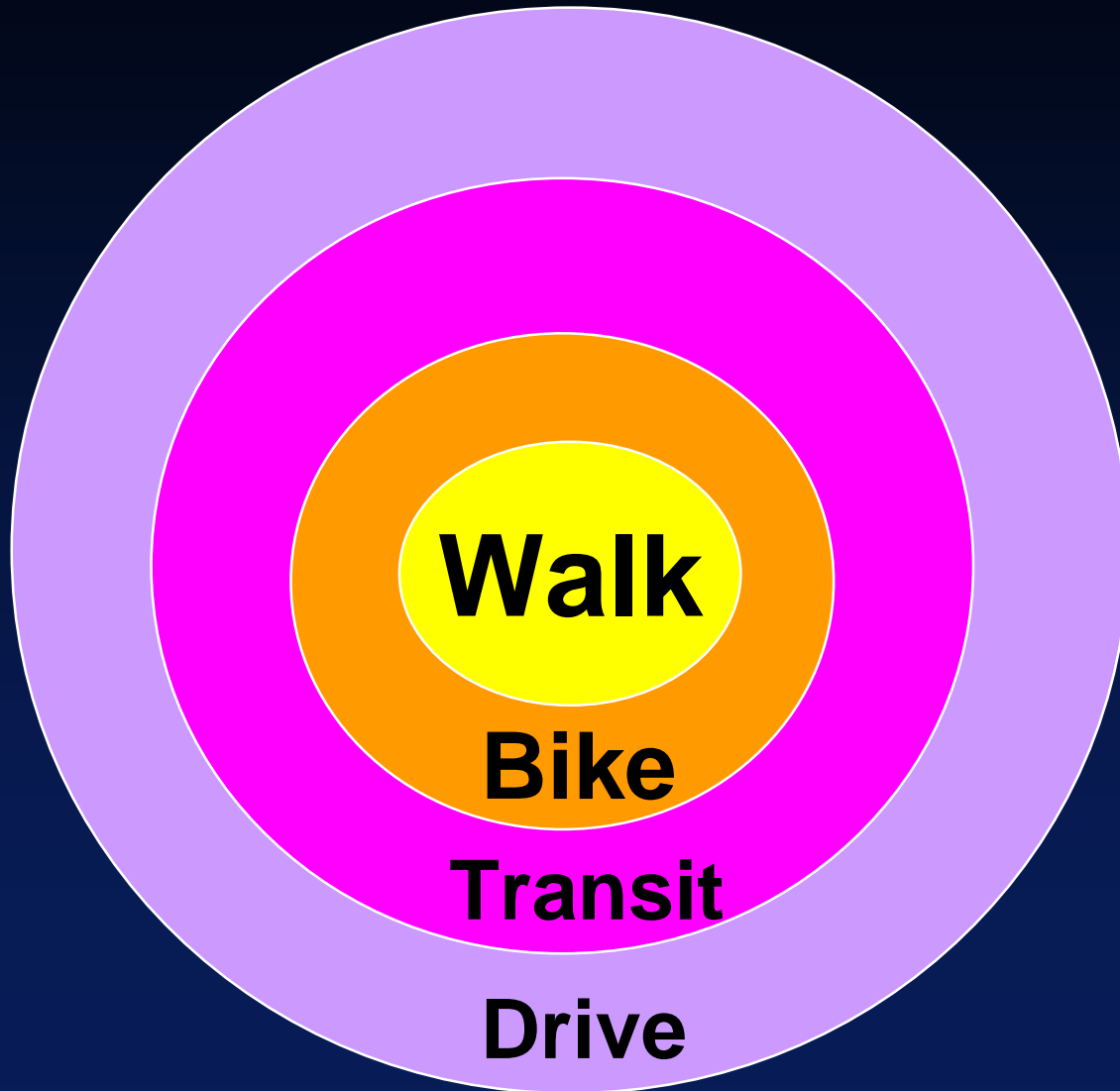


US Auto Trips 1977-1995

National Personal Transportation Survey, USDOT



The ideal “trip” decision hierarchy*:



***Nearly 25% of trips are less than or equal to one mile.
(1995, NPTS)**

What encourages bicycling & walking?

- Land use mix.
- Network of bike & pedestrian facilities.
- Site design and details.
- Safety.



Remedies in all areas :

- Land use.
- Networks.
- Site Design.
 - Safety.

A land use remedy: smart zoning.

Mixed use:
keep retail,
residential,
commercial,
schools,
recreation
close
together.



**Retail on the first
floor; offices,
housing on upper
floors.**



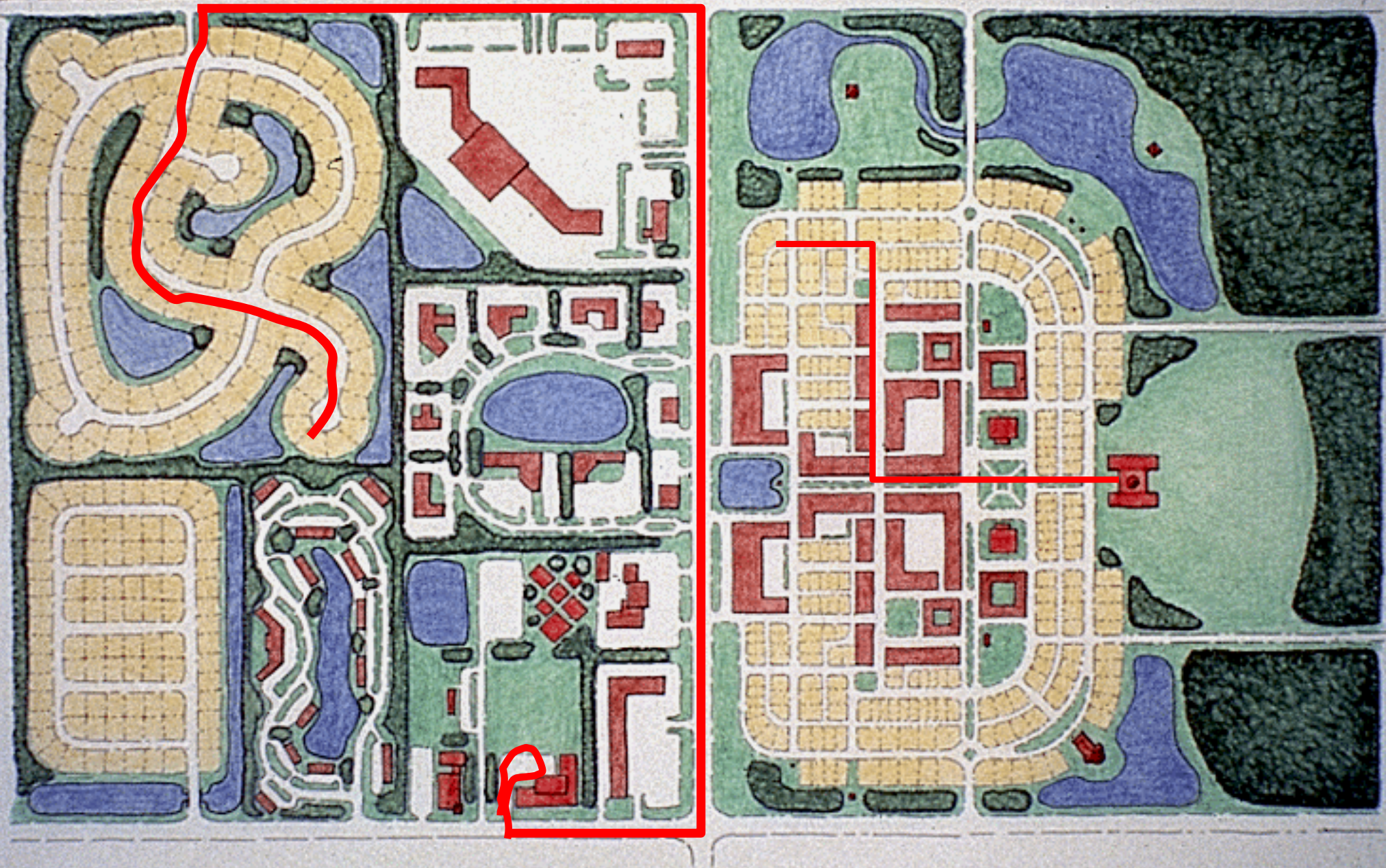
1900's



2000's

First floor retail in parking garages.





Network Ideas

A network remedy: Build sidewalks.

Sidewalks on every street.

5 ft. min. up to 12 ft.+ in urban, high use areas.

Separate from roads.



Comfortable pedestrians? Drivers?





Wrong.

Right.



Bicycle network options:



Bicycle Lane Design Guide.

www.pedbikeinfo.org

5 ft., wider
if along a
hard
barrier or
parked
cars.



A network remedy: Multi-use trails.

Certainly long distance, recreational trails (e.g., Erie Canal Towpath).

But especially local, utilitarian trails.



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Certainly long distance, recreational trails (e.g., East Coast Greenway).
But especially local, utilitarian trails.





**Erie Canal Towpath
Trail:** Stimulating local
development across
upstate NY.





**A newer
approach:
Rails-with-trails.**



Best practices:
www.altaplanning.com

**Improved
connections
to transit.**

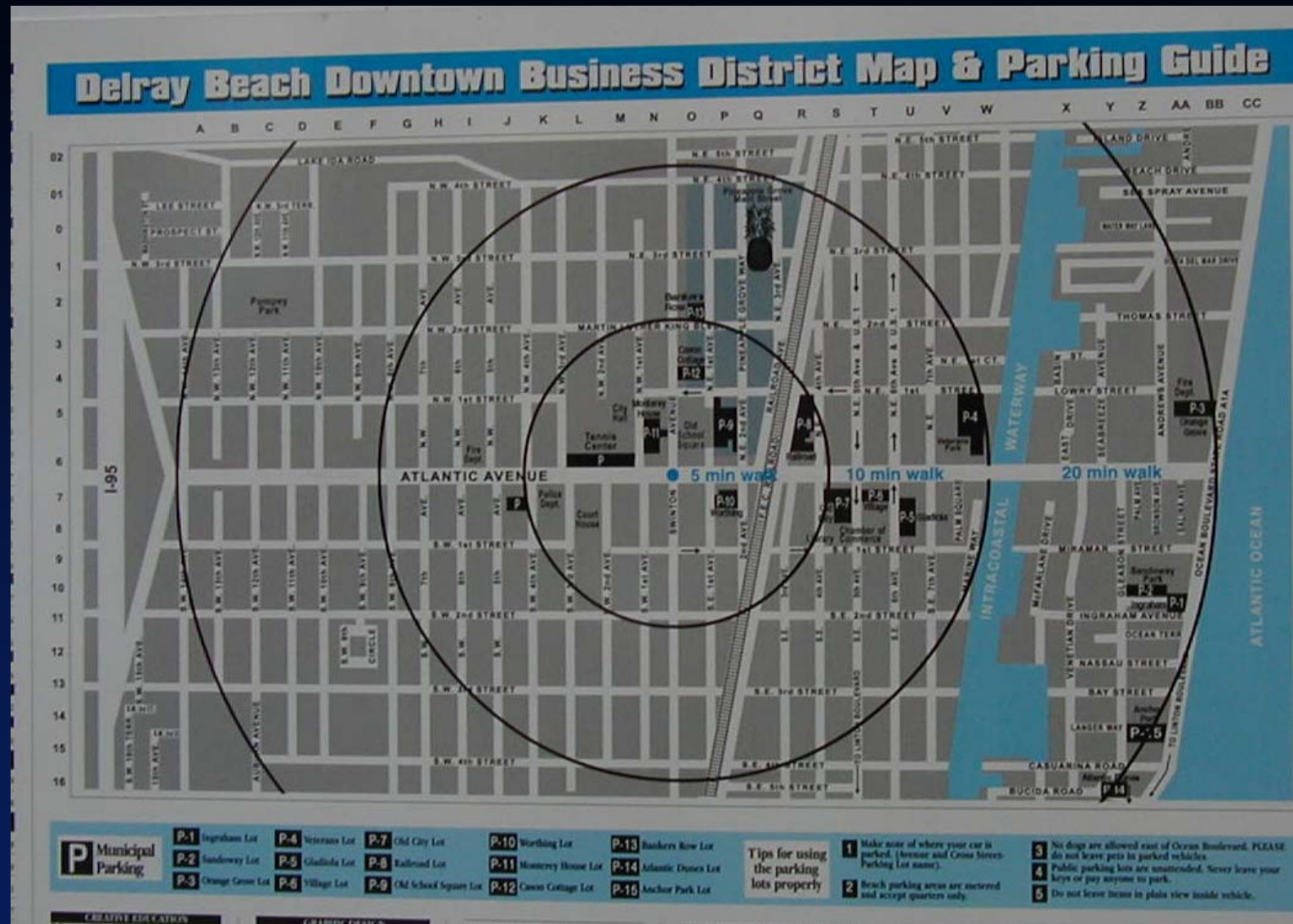




**Bus arrival
information
(Arlington, VA)**

**Way-
finding
for peds,
bikes,
transit.**

**Concentric
circles are
5, 10, and
20 minute
walks.**



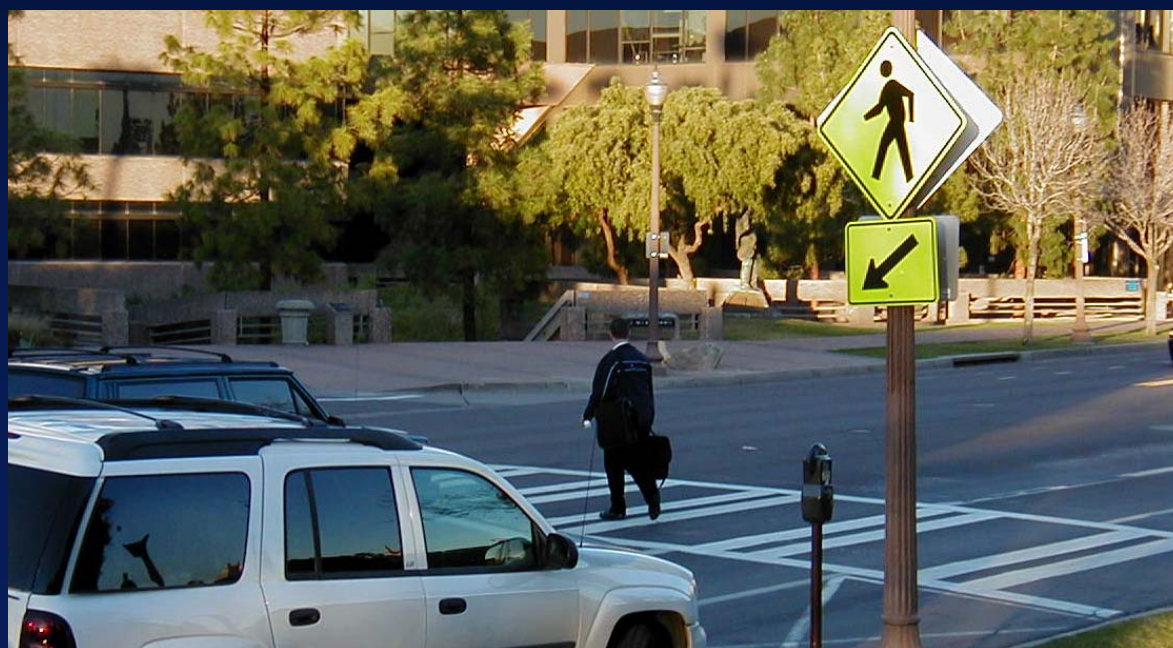
A network remedy: Improved crossings.

**Shortening the distance,
breaking up the task (crossing
islands), improving signal
timing, removing right-on-red,
placing special controls.**



Ladder-style markings





**Note
pedestrian
countdown
timer . . .**





What the pedestrian sees



What the driver sees



**Avoid
Double Right
Turns &
Double Left
Turns**

**Signals:
Poor Design
Invites Wrong
Behavior**



Reducing multiple threat collisions . . .





In-pavement flashers



Overpasses?



**Bridges can accommodate
bikes & peds
Steel Bridge, Portland OR**



How to Use the New Bicycle Signal

1 TO GET A GREEN LIGHT

Place your bicycle on the marking on the sidewalk, with your wheels directly on the lines.



2 When the bicycle signal here is green...



3 ...cyclists can cross the intersection as shown here.



PORTLAND
TRANSPORTATION

Questions? Comments?
Call City of Portland Bicycle Programs at (503)823-CYCL
or submit a comment via the City of Portland's bicycle transportation website
at www.pdxtrans.org





ONE
WAY
→

BIKE
SIGNAL

P

Site Design

Site design:



**Where would
you likely
shop on foot?**

Site solutions:
Buildings near
the street
(maximum
setbacks).



Preclude
storefront parking;
put it on street or
behind buildings.

Site design:



Where would
you sit and eat
outdoors?



**Even fast food
can fit into a
walkable
setting.**



Pedestrian access; bicycle parking.



**An approach:
diagonal
parking.**





**Replace store front parking w/
back in (reverse) angle parking.**



Safety

Safety Research suggests:

- Engineering can dramatically improve safety.
- Increasing ped and bike trips *decreases* accident & fatality rates.



(Jacobsen et.al., *Transportation Safety*)

**Multi-lane
one way
pairs:**



**Tend to create
wide, fast
streets.**

A Safety Remedy: Traffic Calming

Vertical.

Horizontal.

Width.

Controls.

TRAFFIC CALMING

FATALITIES BY SPEED

Percent fatal to Pedestrians



There is compelling evidence that speeds inside
should not exceed 30 KPH (20 mph)

Traffic calming (cont'd)

Vertical
changes:
speed
bumps,
humps,
and tables.







Traffic calming (cont'd)

**Horizontal
changes:
Deflect the
cars,
narrow the
corridor.**





Horizontal Traffic Calming.

Chicane: a diversion or change in direction.



**Neighborhood
mini-circles
replace 4-way
stops.**

**Slow traffic,
maintain flow
on residential
streets.**

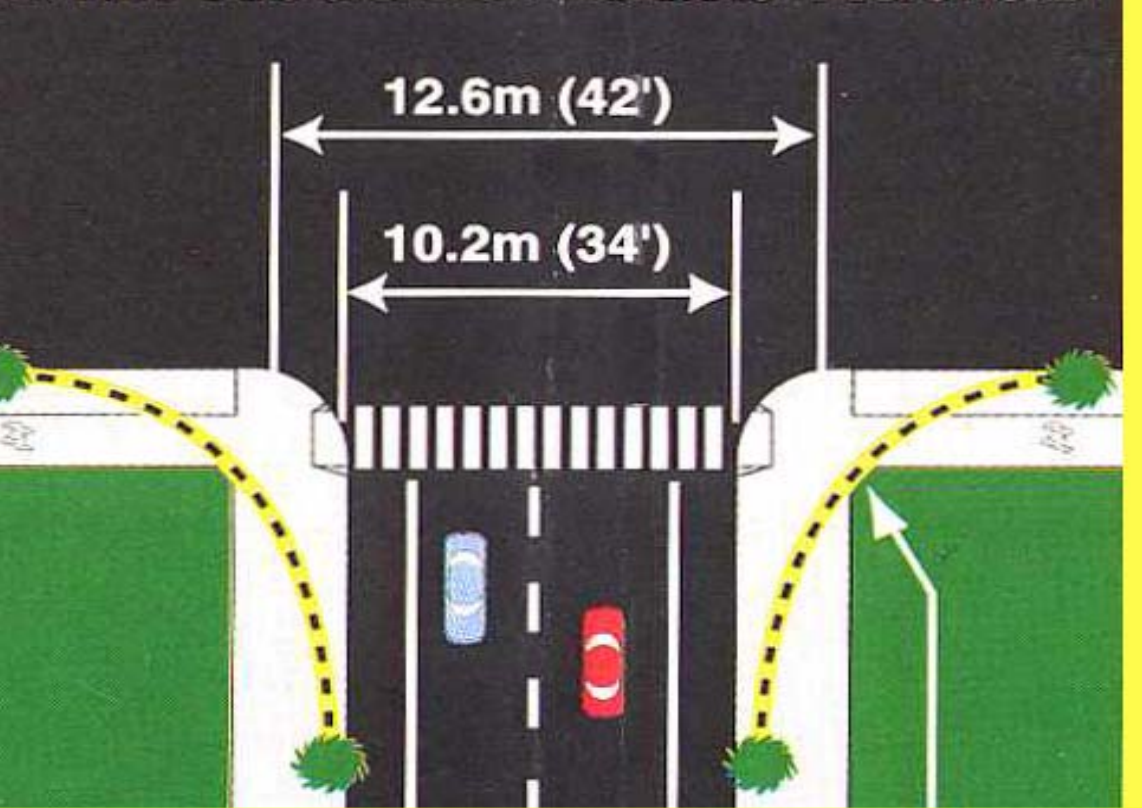




The ultimate chicanes; San Francisco.







Curb extensions.





**Median, or
crossing
islands.**





Traffic calming (cont'd)

**Narrower
corridors, real
and perceived,
slow traffic.
(frictional effect)**

Road Diets: Reduce 4 lanes . . .



**... to 2 lanes
plus a median
or turning
lane,**



**leaving room
for bike
lanes, wider
sidewalks.**

Road diets: consider the possibilities.







So how do to get there?



The other benefits of walking and a walkable community?

- The **inactivity** epidemic; **our kids may pay!**
- **4,000** pedestrian, **40,000** motor vehicle deaths/year.
- **Smog alerts**, over an hour of average commute time/day.
- OPEC; drilling in **ANWR**; an **oil war** in Iraq.
- More eyes on the street, **less crime**.
- **Shopping locally**, keeping dollars close.

Pursue the three P's!

- **Programs:** Build awareness, support, skills, & plans.
- **Projects:** Improve the built environment for walking, cycling
- **Policies:** Rewrite the rules so the changes stick!

Programs

Typical outreach, social marketing efforts:



- Pedometers, pamphlets, T-shirts, health fairs.
- Worksite activity groups.
- Workshops, instruction.

Safe Routes to School

- Build awareness.
- Increase demand.
- Launch coalitions.
- Begin environmental improvements.



www.ctive.com
trips to
school: 14%
(Walk: 11%;
Bike: 3%)

MMWR
Aug. 2002.

International Walk to School Day



October 5, 2005.
www.walktoschool.org

**E.g., Employer
transit passes, bike
parking, lockers,
showers.**

**Team up with
transit and
demand
management.**



Start with one-shot events, but look toward long-term impacts.

- Monthly, weekly, daily farmer's market.
- Street fair (on a road considered for calming or closure).
- Walk to work/transit; create \$ incentives.



Projects

Walk & Bike checklists: Not glamorous, but effective.



- Room to walk/ride?
- Able to cross?
- Traffic a problem?
- Safe, pleasant?
- Accommodating?
- Ample destinations?

www.pedbikeinfo.org

Stickier: Safe Routes to School projects.

- Build, repair sidewalks and trails, remove barriers.
- Crosswalks, signals; crossing guards.
- Relocate drop-off areas, car-free zones.
- Bike parking.
- **Slow traffic.**



Walkable Community Workshops



**National Center
for Bicycling
and Walking**
www.bikewalk.org

Michigan Governor's Council on Physical Fitness, Sports, and Health . . .



Nebraska Dept. of Health and Human Services CVH Program . . .

Adopt a trail programs . . .



**Clean, patrol,
maintain, or
even build a
section.**

**Create advocacy
groups; local and
statewide.**



America Walks:
www.americawalks.org
**League of American
Bicyclists:**
www.bikeleague.org

Policies

“Travel and Environmental Implications of School Siting”

EPA (Oct '03)

- More kids walk and bike to better sited schools.
- **Air quality** is measurably **better** around these schools.



www.epa.gov/smartgrowth

**Show up at
(or serve
on) a local
board:**



**Planning, zoning, school, recreation,
neighborhood association, conservation,
historical, chamber of commerce . . .**

Change the rules.

- **Zoning codes:** Mixed uses, accessory dwellings, density bonuses.



- **Site requirements:** Max. setbacks & curb-cuts; limit drive-throughs.
- **Subdivision rules:** Curbs, sidewalks, road widths.

Are you ready to . . . ?



Best Practice Knowledge:

www.pedbikeinfo.org

- **www.walkinginfo.org**
- **www.bicyclinginfo.org**
- **Down-loadable image library**
 - **www.walktoschool.org**

Best Practice Knowledge:

- **The Pedestrian Facilities Users Guide**
(US DOT: FHWA-RD-01-102)
- **Pedestrian Synthesis Report (update on current research)**
 - **Pedestrian and Bicycle Crash Analysis Tool**

Best Practice Knowledge:

**I.T.E. Traffic Calming web site:
www.ite.org/traffic**



What will you do tomorrow?



- **Be a champion** - Talk to others.
- **Collect data.** Map routes, measure traffic, speeds, & mode shares.
- **Have an event.** E.g., Street fair, Walk to School Day.
- **Fix stuff.** Paint crosswalks, replace lights, cut brush)
- **Try new stuff.** Programs, signs, cones, paint.



Three editorial points:

- Why it really matters.
- What's essential to success.
- What may not be.

Why care about walking and walkable communities?

- The **inactivity** epidemic; **our kids may pay!**
- **4,000** pedestrian, **40,000** motor vehicle deaths/year.
- **Smog alerts**, over an hour of average commute time/day.
- OPEC; drilling in **ANWR**; an **oil war** in Iraq.
- More eyes on the street, **less crime**.
- **Shopping locally**, keeping dollars close.

What's essential?

- **Inspired leadership.** True champions who persevere.
- **Vision.** Ability to see and describe the big-picture goal.
- **Key partners.** Transport, DPW, planning, development & business.
- **Time** and patience.

What's not?

- **Money.** Don't overlook . . .
 - Routine accommodation.
 - Opportunistic improvements.
 - Occasional special projects.
- **A Huge Coalition.** Can be fantastic, but isn't the only way.
- **Massive Popular Support.** Initially expect resistance; build gradually.

The BIG Recommendation:

**Bring this into your work—
everything you do—and *also*
be a **role model and local
change agent**. Otherwise
don't even bother talking
about it.**

The role of public health:

- Enumerate: An epidemic of **physical inactivity** and poor nutrition.
 - Enunciate: **Engineering** routine activity back into our lives.
- Collaborate: Create **interdisciplinary teams**, launch models of success.
- Facilitate: **Institutionalize**; change the rules, how we do business.

Some select resources:

- www.bikewalk.org
- www.pedbikeinfo.org
- www.americawalks.org
- www.walktoschool.org
- www.activelivingbydesign.org
- [www.cdc.gov/nccdphp/dnpa/
physical/trails.htm](http://www.cdc.gov/nccdphp/dnpa/physical/trails.htm)

Look for partners interested in the common threads :

- **Networks.**
- **Land use.**
 - **Safety.**
- **Site Design.**

The Golden Triangle

